

(REFERENCE COPY - Not for submission)

# FCC Form 399: Incentive Auction Relocation Reimbursement Fund System

File Number: **0000027637** | FRN: **0001961713** | Facility ID: **8688**  
 Repack Channel: **17 (UHF)** | Entity: **Broadcaster** | Filing Status: **Submitted**  
 Date Submitted: **12/04/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>CAPITOL BROADCASTING COMPANY, INC.</b> Doing Business As: CAPITOL BROADCASTING COMPANY, INC.	Vernessa L. Hoffman 2619 WESTERN BLVD RALEIGH, NC 27606 United States	+1 (919) 821-8730	vhoffman@cbc-raleigh.com	Corporation

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

Applicant	Address	Phone	Email
<b>Peter Sockett</b> <i>Director of Engineering and Operations</i> <i>Capitol Broadcasting Company</i>	Pete Sockett 2619 Western Blvd Raleigh, NC 27606 United States	+1 (919) 821-8573	psockett@wral.com

**Broadcaster  
Information  
and  
Transition  
Plan**

Question		Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.		Yes
Briefly describe transition plan		All 4 broadcasters will need to replace antennas on the candelabra. The transition plan for WRAL / WRAZ is to replace the existing Aux antenna with a single ch15 / 17 slot antenna at approx 1720ft (524m) to use as both the new AUX and interim facility.

**Transmitters**

Section	Question	Response
Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	
	Ownership	Owned
	Owner	
	Site	
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	CD2400P4
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Other
	Description	4 tube system
	Power capacity	100 kw
	Solid State Cooling	
	Solid State Power Capacity	
	Other Transmitter Type	

**Primary  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Description of Use	
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTED-120
	Transmitter Type	Solid state
	IOT Power Type	
	Other	
	Power capacity	
	Solid State Cooling	Liquid
	Solid State Power Capacity	76.0 kw
	Other Transmitter Type	
	Justification for New Transmitter	1) Manufacturer (Gates Air) will not support channel changes to this model of transmitter. 2) Comark estimate for IOT transmitter is higher than a solid State transmitter from GatesAir

**Primary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	400.0 feet
	Other Electrical Service	No
	Description	
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	15 tons
	Other Size	
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	1600.0 square feet
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	
	Is a channel 14 Mask Filer needed?	
	Is additional field engineering time needed?	
	Number of Days	

**Primary  
Transmitter**

**Other Transmitter Cost Not Listed**

Name	Description
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<b>System installation</b>	Manufacturer to come to site to install and commission.
<b>RF System</b>	Magic T / Mask filter / Dummy load and RF Line for Installation
<b>Spare Modules and Power supplies</b>	Currently we keep 1 spare IOT tube on hand in the event of a failure. This purchases spare parts for Solid State TX

**Antennas**

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

**Auxiliary  
Antenna****Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
<b>Existing Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Side-mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	2
	Number of Panels	36
	Design power capacity in use	100.0 %
	Lower Limit	674.00 MHz
	Upper Limit	710.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.00 kW



Manufacturer	
Model	ETU-P3H12-(48-53)
Year	2008

**Facility ID's and Call Signs of all stations with whom the antenna is shared.**

Facility ID	Call Sign
64611	WRAZ

## Auxiliary Antenna

### New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Interim Facility and Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side-mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	805.00 kW

Manufacturer	
Model	ATW25H3- ESO-15 /17H
Year	2018
Justification for New Antenna	This antenna will serve as both an Interim facility while the candelabra is rebuilt and will replace the existing AUX antenna already in service for both WRAL and WRAZ

## Auxiliary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	2
	Frequencies of channels supported	upper and lower frequency
	Frequency	476.0 MHz - 494.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No

<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	8 3/16 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

## Auxiliary Antenna

### Other Antenna Cost Not Listed

Information not provided.

**Primary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
<b>Existing Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Top-mount stacked
	Antenna position in stack	Top
	Polarization	Elliptical
	Type	Slotted coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.00 kW

Manufacturer	
Model	ATW25H5- ETO-48H
Year	2008

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## Primary Antenna

### New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top-mount stacked
	Antenna position in stack	Top
	Polarization	Elliptical
	Type	Slotted coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	533.00 kW
	Manufacturer	

Model	ATW25H4-ETO-17M
Year	2018
Justification for New Antenna	Required as old antenna is cut for channel 48

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	7 3/16 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes



**Primary  
Antenna**

**Other Antenna Cost Not Listed**  
Information not provided.

**Transmission  
Line**

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

**Auxiliary  
Transmission  
Line**

**Existing Transmission Line**

Section	Question	Response
<b>Existing Transmission Line Description</b>	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	Type	Rigid
	Diameter	7 3/16 inches
	Segment Length	20'
	Other Segment Length	
	Number of parallel runs	1
	Length	1738 feet per run

**Facility ID's and Call Signs of all stations with whom the transmission line is shared.**

Facility ID	Call Sign
64611	WRAZ

**Auxiliary  
Transmission  
Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup) and Interim Facility
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	8 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	2013 feet per run
	Justification for New Transmission Line	Required to feed new Aux / Interim antenna. Cost will be split with WRAZ.

**Auxiliary  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Information not provided.

Primary  
Transmission  
Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Waveguide
	Diameter	
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	2210 feet per run

**Primary  
Transmission  
Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	7 3/16 inches
	Segment Length	19 ½ '
	Other Segment Length	
	Number of parallel runs	1
	Length	2210 feet per run
	Justification for New Transmission Line	Existing run is GLW 1500 Waveguide that is frequency specific for High Band UHF

**Primary  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Information not provided.

**Tower Equipment And Rigging Costs**

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

**Primary Tower**

**Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1027322
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	35° 40' 29.0" N-
	Longitude (NAD83)	078° 31' 39.0" W-
	Overall Structure Height	1988.82 feet
	Support Structure Height	1988.82 feet
	Ground Elevation Above Mean Sea Level (AMSL)	359.90 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	CBC REAL ESTATE COMPANY, INC.
	Date Constructed	03/23/2000

**FM, AM or TV radio  
broadcasters. Facility ID's,  
Call Signs and Services of  
other broadcast stations with  
whom the tower is shared**

Facility ID	Call Sign	Service
73936	WTKK	FM
50782	WNCN	DTV
64611	WRAZ	DTV
73205	WLFL	DTV

## Primary Tower

### Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for tower with candelabra
Tower Reinforcements	Please select whether tower reinforcements are needed:	Serious Reinforcements needed

## Primary Tower

### Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra



<b>Helicopter Services Required</b>	Are helicopter services required?	No
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**Primary  
Tower**

**Other Tower Expenses Not Listed**

Name	Description
<b>Relocate ENG Dish</b>	Relocate 2 ENG receive dishes to create room for Interim / Aux antennas - Split with WRAZ

**Outside Professional Services Costs**

Section	Question	Response	
<b>Outside Project Management Services</b>	Do you require outside project management services?		
	Number of Hours	N/A	
	Explanation	N/A	
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes	
	Prepare engineering section of Form FCC Construction Permit Application	Yes	
	For Auxiliary Facility	N/A	
	For Main Facility	Yes	N /A
	Prepare engineering section of Form FCC License to Cover Application	Yes	
	For Auxiliary Facility	Yes	
	For Main Facility	Yes	
	Prepare request for Special Temporary Authority	No	
	Quantity	N/A	
	Do you have Distributed Transmission System engineering services?	N/A	
	Critical Facility	N/A	
	Terrain-Shielded Facility	N/A	
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes	
	For Auxiliary Facility	Yes	
	For Main Facility	Yes	
	Prepare and file Form FCC License to Cover Application	Yes	
	For Auxiliary Facility	Yes	
	For Main Facility	Yes	

	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes
	Number of Days	3
	Justification	Independent verification and inspection of installed systems

**Outside Professional Services Costs**      **Other Professional Services Expenses Not Listed**

Information not provided.

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
<b>Permit and Filing Costs</b>	Local Zoning	No
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	No
<b>Other Miscellaneous Expenses</b>	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	No
	Does this relocation require Equipment Storage?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other  
Expenses**

**Other Expenses Not Listed**

Name	Description
Facilty remote control and monitoing modifications	Modifications to existing system to add new telemetry and control.

## Cost Information

### Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Transmitter ULXTED-120</b>	<b>\$2,561,400.00</b>	<b>\$2,542,200.00</b>		<b>\$1,053,306.70</b>	
UHF - Liquid Cooled Solid State Transmitter 76.0 kW	<i>\$1,900,000.00</i>	\$1,900,000.00	N/A	\$1,053,306.70	N/A
Transformer 3 phase /480v - 300 KVA	\$35,000.00	\$35,000.00	N/A	N/A	N/A
4" Rigid Conduit and Wiring (Cost per foot)	\$38,400.00	\$19,200.00	This represents 1 /2. WRAZ will cover the other 1/2	N/A	N/A
15 Ton system	\$53,000.00	\$53,000.00	N/A	N/A	N/A

Other -- Building Addition Size: 1600.0	<i><b>\$250,000.00</b></i>	\$250,000.00	Our facility is full with no room to install new equipment before old equipment is removed. This facility will be shared with WRAZ. This is 1/2 the cost, other half will be represented on WRAZ	N/A	N/A
System installation	<i><b>\$85,000.00</b></i>	\$85,000.00	This is the installation costs from the Manufacturer to install and commission system	N/A	N/A
Spare Modules and Power supplies	<i><b>\$35,000.00</b></i>	\$35,000.00	N/A	N/A	N/A
RF System	<i><b>\$165,000.00</b></i>	\$165,000.00	N/A	N/A	N/A
<b>Sub-total</b>	\$2,561,400.00	\$2,542,200.00	N/A	\$1,053,306.70	N/A
<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A

## Components

Actual Information	
Description	File Name
UHF - Liquid Cooled Solid State Transmitter 76.0 kW	<p><b>Component Description:</b> 50% down for transmitter</p> <p><b>Amount:</b> \$1,053,306.70</p>

Transformer 3 phase/480v - 300 KVA	Information not provided.
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
15 Ton system	Information not provided.
Other -- Building Addition Size: 1600.0	Information not provided.
System installation	Information not provided.
Spare Modules and Power supplies	Information not provided.
RF System	Information not provided.



**Cost  
Information**

**Antennas**

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Antenna ATW25H4- ETO-17M</b>	<b>\$294,600.00</b>	<b>\$294,600.00</b>		<b>\$0.00</b>	
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,200.00	\$13,200.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,400.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$275,000.00	\$275,000.00	N/A	N/A	N/A
<b>Auxiliary Antenna ATW25H3- ESO-15/17H</b>	<b>\$268,900.00</b>	<b>\$258,200.00</b>		<b>\$0.00</b>	

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,000.00	\$2,500.00	1/2 split with WRAZ	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 805 kW input, elliptically or circularly polarized	<b><i>\$137,500.00</i></b>	\$137,500.00	This antenna is a "combined antenna" the other 1 /2 of the cost is shared with WRAZ	N/A	N/A
Sweep test of existing antenna	\$6,400.00	\$3,200.00	1/2 split with WRAZ	N/A	N/A
New combiner, cost per channel (without antenna)	\$80,000.00	\$95,000.00	Interim (AUX) antenna will support full power from each station (WRAL and WRAZ) requiring larger sized combiner.	N/A	N/A

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,000.00	\$9,000.00	This antenna is a "combined antenna" the other 1 /2 of the cost is shared with WRAZ	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$22,000.00	\$11,000.00	1/2 split with WRAZ	N/A	N/A
<b>Sub-total</b>	\$563,500.00	\$552,800.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A

## Components

Information not provided.

Cost  
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$609,960.00	\$609,000.00		\$0.00	
Rigid Transmission Line - copper, 7 3 /16"	\$609,960.00	\$609,000.00	N/A	N/A	N/A
Auxiliary Transmission Line	\$762,927.00	\$381,000.00		\$0.00	
Rigid Transmission Line - copper, 8 3 /16" broadband	\$762,927.00	\$381,000.00	This represents 1/2. WRAZ will cover the other 1 /2	N/A	N/A
Sub-total	\$1,372,887.00	\$990,000.00	N/A	\$0.00	N/A
Total for all systems	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A

Components

Information not provided.

## Cost Information

### Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Tower TOWER</b>	<b>\$1,444,000.00</b>	<b>\$844,000.00</b>		<b>\$0.00</b>	
Relocate ENG Dish	<i>\$25,000.00</i>	\$25,000.00	This is 1/2 of the cost - other half will be covered by WRAZ	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$400,000.00	\$300,000.00	N/A	N/A	N/A
Serious tower reinforcement /modifications	\$1,000,000.00	\$500,000.00	Until designs are complete from all 5 stations on this tower we are splitting a \$1M placeholder with WRAZ	N/A	N/A
Structural engineering tower load study for a documented tower with candelabra	\$19,000.00	\$19,000.00	N/A	N/A	N/A

<b>Sub-total</b>	\$1,444,000.00	\$844,000.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A

## Components

Information not provided.

Cost  
Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$137,250.00	\$59,750.00		\$0.00	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,000.00	\$4,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,000.00	\$5,000.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,500.00	\$2,500.00	N/A	N/A	N/A

Address transition timing and coordination issues w/ other stations and wireless	\$2,500.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,000.00	\$7,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,000.00	\$3,000.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,500.00	\$1,500.00	N/A	N/A	N/A



Additional Field Engineering Service, 3 Days	<i>\$6,000.00</i>	\$6,000.00	Estimating \$2000 per day for an independent verification of the new transmission systems	N/A	N/A
RF Exposure Measurements	\$20,000.00	\$2,500.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$80,000.00	\$20,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,250.00	\$2,250.00	N/A	N/A	N/A
<b>Sub-total</b>	\$137,250.00	\$59,750.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A

## Components

Information not provided.

## Cost Information

### Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Other Expenses</b>	<b>\$48,575.00</b>	<b>\$41,325.00</b>		<b>\$0.00</b>	
Facility remote control and monitoing modifications	<i>\$15,000.00</i>	\$15,000.00	Facility remote control and monitoring modifications	N/A	N/A
MVPD Notification of Channel Change	<i>\$1,250.00</i>	\$1,250.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Non-zoning permits	<i>\$1,000.00</i>	\$1,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,000.00	\$3,750.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$325.00	\$325.00	N/A	N/A	N/A
<b>Sub-total</b>	<b>\$48,575.00</b>	<b>\$41,325.00</b>	N/A	<b>\$0.00</b>	N/A

<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	N/A	\$1,053,306.70	N/A
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### Components

Information not provided.

<b>Cost Information</b>	<b>Grand Total</b>			
		<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>	<b>Actual Cost</b>
	<b>Total for all systems</b>	\$6,127,612.00	\$5,030,075.00	\$1,053,306.70

<b>Construction Status</b>	<b>Question</b>	<b>Response</b>
	Is construction complete?	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.</li> </ol>	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Susan Larson Frazier</b> <i>Business Manager</i></p> <p>12/04/2017</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named entity acknowledges that all certifications and attached documentation are considered material.</li> <li>2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.</li> </ol>	



3. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
4. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
5. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.
6. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
7. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Susan  
Larson  
Frazier**  
*Business  
Manager*

12/04/2017

## Attachments